

07-07-04

Docket No: AM101281  
Patent

1/See

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re Application of: M. MERLE ELLOSO, ET AL.  
Application No.: 10/751,543 Group Art No.: 1646  
Filed: January 5, 2004 Examiner:  
For: THE USE OF ESTROGEN RECEPTOR ALPHA MODULATORS FOR  
THE TREATMENT OF MULTIPLE SCLEROSIS  
Confirmation No.: 2403  
Customer Number: 25291

Mail Stop Amendment  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

1. Preliminary Statements

In accordance with 37 CFR 1.97 and 1.98, Applicants submit herewith patents, publications, or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR 1.56. This Information Disclosure Statement is not to be construed as a representation that: (i) a search has been made; (ii) the information is material to the examination of this application; (iii) additional information material to the examination of this application does not exist; (iv) the information, protocols, results and the like reported by third parties are accurate or enabling; or (v) the information constitutes prior art to the subject invention.

**CERTIFICATE OF MAILING 37 CFR §1.10**

I hereby certify that this paper and the documents referred to as enclosed therein are being deposited with the United States Postal Service on the date written below in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EV100495817 US addressed to the Mail Stop Amendment, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

July 6, 2004  
Date

Ilene M. Hurwitz  
Ilene M. Hurwitz

2. Identification of Time of Filing

This Information Disclosure Statement

- a.  is filed within three months of the filing date of the application.
- b.  is filed before the mailing date of a first Office Action on the merits.
- c.  is filed before the mailing date of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.
- d.  is filed after the period specified in 2(a), 2(b) or 2(c) above, but before the mailing date of a final action under 37 CFR 1.311. This statement includes a certification under 37 CFR 1.97(e) or the fee set forth in 37 CFR 1.17(p).
- e.  is filed after the mailing date of a final action or Notice of Allowance but before payment of the issue fee. This statement includes (i) a certification under 37 CFR 1.97(e), and (ii) the fee set forth in 37 CFR 1.17(p).

3.  Certification under 37 CFR 1.97(e) and 1.704(d)

The undersigned attorney certifies

- a.  that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the statement, or
- b.  that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the statement.
- c.  certifies that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign application patent office in a counterpart foreign application and was not received by any individual designated in 37 CFR 1.56(c) more than thirty (30) days prior to the filing of the statement.

Newly Cited Information

A legible copy of the patents, publications or other information cited on the attached form PTO 1449 is enclosed, except that no copy of a pending U.S. application is enclosed, and if this patent application was filed or entered the national stage after June 30, 2003, no copy of a U.S. patent or U.S. patent application publication is enclosed.

Previously Cited Information

No copy of the patents, publications or other information cited on the attached form PTO-1449 is enclosed because it has been previously cited by or submitted to the Office in a prior application which is relied upon for an earlier filing date under 35 USC 120.

Prior application is Application Number , filed on of for

Concise Explanation  
Documents cited above which are not in the English Language

a.  have been explained in the specification.  
b.  have an abstract (or other concise explanation) in English enclosed or if readily available a translation into English of the document is enclosed.

Form PTO-1449 is enclosed in duplicate.

Fees  
 Fee for filing under 37 CFR 1.97(c) or (d)      Fee: \$180.00

Method of Payment of Fees:

Charge Deposit Account No. 01-1425 in the amount of \$0

A duplicate of this statement is enclosed.

Instructions as to Overpayment/Underpayment:

Credit any overpayment and charge any underpayment to Deposit Account No. 01-1425.



---

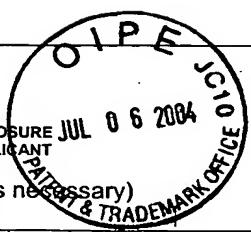
Daryl L. Webster  
Attorney for Applicants  
Reg. No. 34,276

Wyeth  
Patent Law Department  
Five Giralda Farms  
Madison, NJ 07940  
Tel. No. (973) 660-7648

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)



## Complete if Known

Application Number	10/751543
Filing Date	January 5, 2004
First Named Inventor	M. MERLE ELLOSO ET AL.
Group Art Unit	1646
Examiner Name	

Sheet	1	of	2	Attorney Docket Number	AM101281
-------	---	----	---	------------------------	----------

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number (If Known)	Kind Code (If Known)			
1.	US 5,075,321			Alan D. Schreiber et al.	12-24-1991	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (If Known)				
2.	WO	96/05823			Glasebrook	02-29-1996		<input type="checkbox"/>
3.	EP	0664125			Glasebrook	07-26-1995		<input type="checkbox"/>
4.	EP	0668075			Gitter et al.	08-23-1995		<input type="checkbox"/>
5.	EP	0966965			Anderson	06-17-1998		<input type="checkbox"/>
6.	EP	0747052			Calnek et al.	06-07-1995		<input type="checkbox"/>
7.	WO	01/85154			Offner	11-15-2001		<input type="checkbox"/>
8.	WO	02/085374			Voskuhl	10-31-2002		<input type="checkbox"/>
9.	EP	0724879			Glasebrook et al.	08-07-1996		<input type="checkbox"/>
10.	EP	0664123			Zuckerman	07-26-1995		<input type="checkbox"/>

## OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.		T
		11.	L. D. APELGREN ET AL., The Effect of a Selective Estrogen Receptor Modulator on the Progression of Spontaneous Autoimmune Disease in MRL Ipr/Ipr Mice; Cellular Immunology, 173, pp. 55-63, (1996), Article NO. 0251, Academic Press, Inc.	
		12.	CAROLINE C. WHITACRE, Sex differences in autoimmune disease; Nature Immunology, Vol. 2 No. 9, pp. 777 - 780, September 2001, 2001 Nature Publishing Group	<input type="checkbox"/>
		13.	ODED ABRAMSKY, Pregnancy and Multiple Sclerosis, Annals of Neurology, Supplement to Vol. 36, 1994, pp. S38 - S41, 1994 American Neurological Association	<input type="checkbox"/>
		14.	CHRISTIAN CONFAVREUX ET AL., Rate of Pregnancy-Related Relapse in Multiple Sclerosis; The New England Journal of Medicine, Vol. 339, No. 5, July 30, 1998, pp. 285 - 291, Massachusetts Medical Society	<input type="checkbox"/>
		15.	DENISE M. DAMEK ET AL., Pregnancy and Multiple Sclerosis, Mayo Clin Proc, October 1997, Vol. 72, pp. 977 - 989, 1997 Mayo Foundation for Medical Education and Research, Department of Neurology, Mayo Clinic, Jacksonville, Florida	<input type="checkbox"/>
		16.	NANCY L. SICOTTE, Treatment of Multiple Sclerosis with the Pregnancy Hormone Estriol; Annals of Neurology, Vol. 52, No. 4, October 2002, pp. 421 - 428; Department of Neurology, Reed Neurological Research Center	<input type="checkbox"/>
		17.	WENDY GILMORE ET AL., Effect of Estradiol on Cytokine Secretion by Proteolipid Protein-Specific T Cell Clones Isolated from Multiple Sclerosis Patients and Normal Control Subjects; The Journal of Immunology, 1997, 158: 446 - 451, 1997 The American Association of Immunologists	<input type="checkbox"/>
		18.	JORGE CORREALE ET AL., Steroid Hormone Regulation of Cytokine Secretion by Proteolipid Protein-Specific CD4+ T Cell Clones Isolated from Multiple Sclerosis Patients and Normal Control Subjects, The Journal of Immunology, 1998, 161: 3365 - 3374, 1998 The American Association of Immunologists	<input type="checkbox"/>
		19.	YING C.Q. ZANG ET AL., Regulatory effects of estriol on T cell migration and cytokine profile: inhibition of transcription factor NF-kB, Journal of Neuroimmunology, 124 (2002) 106 - 114, 2002 Elsevier Science B.V.	<input type="checkbox"/>
		20.	LISELOTTE JANSSON ET AL, Estrogen induces a potent suppression of experimental autoimmune encephalomyelitis and collagen-induced arthritis in mice, Journal of Neuroimmunology, 53 (1994) 203 - 207, 1994 Elsevier Science B.V.	<input type="checkbox"/>

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449/PTO  INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (use as many sheets as necessary)				Complete if Known	
				Application Number	10/751543
				Filing Date	January 5, 2004
				First Named Inventor	M. MERLE ELLOSO ET AL.
				Group Art Unit	1646
				Examiner Name	
Sheet	2	of	2	Attorney Docket Number	AM101281

### OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	21.	S. KIM ET AL., Estriol ameliorates autoimmune demyelinating disease, Neurology 52: 1230 - 1238, 1999 The American Academy of Neurology	<input type="checkbox"/>
	22.	HALINA OFFNER ET AL., Estrogen potentiates treatment with T-cell receptor protein of female mice with experimental encephalomyelitis; The Journal of Clinical Investigation, May 2000, Vol. 105, No. 10, pp. 1465 - 1472	<input type="checkbox"/>
	23.	ATSUSHI ITO ET AL., Estrogen Treatment Down-Regulates TNF- $\alpha$ Production and Reduces the Severity of Experimental Autoimmune Encephalomyelitis in Cytokine Knockout Mice; The Journal of Immunology, 2001, 167: 542 – 552, The American Association of Immunologists	
	24.	BRUCE F. BEBO JR. ET AL., Low-dose Estrogen Therapy Ameliorates Experimental Autoimmune Encephalomyelitis in Two Different Inbred Mouse Strains, The Journal of Immunology, 2001, 166: 2080 – 2089, 2001 The American Association of Immunologists	
	25.	MADELINE DUVIC ET AL., Effect of the Anti-estrogen, Nafoxidine, on NZB/W Autoimmune Disease, Arthritis and Rheumatism, Vol. 21, No. 4 (May 1978), pp. 414 – 417	
	26.	ALLAN D. STURGESS ET AL., Effects of the Oestrogen Antagonist Tamoxifen on Disease Indices in Systemic Lupus Erythematosus, J. Clin. Lab. Immunol. (1984) 13: 11 – 14, 1984 Teviot Scientific Publications	
	27.	ZEV M. STHOEGER ET AL., The Beneficial Effect of the Estrogen Antagonist, Tamoxifen, on Experimental Systemic Lupus Erythematosus, The Journal of Rheumatology 1994, 21:2231-2238,	
	28.	W. M. WU ET AL., Tamoxifen Decreases Renal Inflammation and Alleviates Disease Severity in Autoimmune NZB/W F1 Mice, Scandinavian Journal of Immunology, 52, 393-400, 2000 Blackwell Science Ltd.	
	29.	JTJ KANKAANPAA, Raloxifene – a multifunctional medicine: review, APIMALL General Practice Issue 1.0 October 1999 <a href="http://www.apimall.com/apinet/nonname17.html">http://www.apimall.com/apinet/nonname17.html</a> . The Health Channel	
	30.	J. P. LEONARD ET AL., Prevention of Experimental Autoimmune Encephalomyelitis by Antibodies Against Interleukin 12, Brief Definitive Report, J. Exp. Med @ The Rockefeller University Press, 0022-1007/95/01/0381/06, Vol. 181, January 1995, 381-386	

Examiner Signature		Date Considered
--------------------	--	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.